

Conspiracy to Commit Electronics – Wrecking Ball

Wrecking Ball is based on the legendary Mesa/Boogie Dual Rectifier Solo (red channel). Running three 12AX7 tubes allows it to cover everything from mild overdrive to screaming leads. Featuring a full 3-band EQ with presence control gives you the flexibility to dial in exactly what you need to cut through a mix or rumble the whole block.

DISCLAIMER AND WARNING

This circuit contains high voltages exceeding 200V and is EXTREMELY DANGEROUS. Conspiracy to Commit Electronics is not responsible for any damage or injury caused by improper use or assembly. I encourage you to use the utmost care when building, testing, and using this pedal. If high voltages make you uncomfortable, DO NOT BUILD THIS. Just don't. This is not a beginner project and should not be treated as such. It was designed to be as easy as possible to assemble and make it work, but **you have to be careful**.

Normally I would recommend testing a circuit before putting it into the box, but in this case I recommend fully boxing the unit before testing for the sake of safety. If for any reason you need to probe voltages inside the box, do so with extreme caution, and only keep one hand near the box at a time, do not allow both hands to touch the box/circuit at the same time.

Recommended Build Instructions

Since this build is not only more complicated but also very different than typical DIY pedal builds, I've provided detailed build instructions at the end of this document. You're welcome to try your own method, but the boards were designed to be assembled using the methods explained in pages ___ here.

Bill of Materials

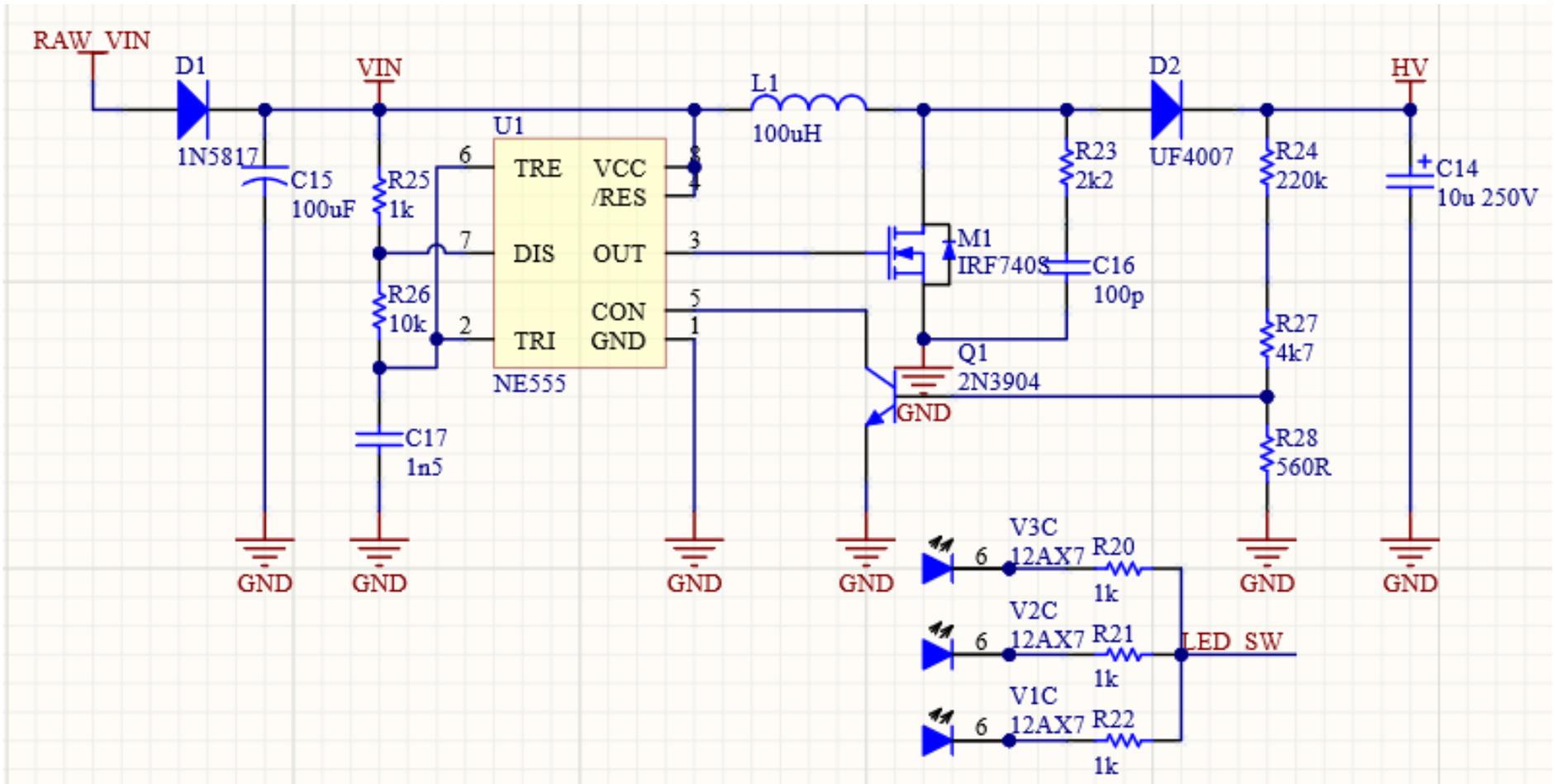
The links below are recommendations and suitable replacements can be used as needed. These are non-affiliated links, I get no compensation of any kind if these links are used.

Comment	Description	Quantity	Link	Alternate
560R	1/4W Resistor	1	Tayda Link	
1k	1/4W Resistor	4	Tayda Link	
1k8	1/4W Resistor	3	Tayda Link	
2k2	1/4W Resistor	1	Tayda Link	
4k7	1/4W Resistor	1	Tayda Link	
10k	1/4W Resistor	1	Tayda Link	
39k	1/4W Resistor	1	Tayda Link	
100k	1/4W Resistor	4	Tayda Link	
220k	1/4W Resistor	5	Tayda Link	
330k	1/4W Resistor	1	Tayda Link	
470k	1/4W Resistor	2	Tayda Link	
1M	1/4W Resistor	2	Tayda Link	
2M2	1/4W Resistor	2	Tayda Link	
A1M	9mm Potentiometer	3	SBP Link	Tayda Link
A250k	9mm Potentiometer	1	SBP Link	Tayda Link
B25k	9mm Potentiometer	2	SBP Link	Tayda Link
82p 50V	Ceramic capacitor	1	Tayda Link	
100p 50V	Ceramic capacitor	1	Tayda Link	
680p 50V	Ceramic capacitor	1	Tayda Link	
1n 50V	Film capacitor	2	Tayda Link	
1n5 50V	Film capacitor	1	Tayda Link	
3n3	Film capacitor	1	Tayda Link	
22n 50V	Film capacitor	2	Tayda Link	
22n 630V	High voltage film capacitor	3	Tayda Link	
1u 25V	Electrolytic capacitor	3	Tayda Link	
4u7 25V	Electrolytic capacitor	1	Tayda Link	
10u 250V	Electrolytic capacitor	1	Tayda Link	
100uF 25V	Electrolytic capacitor	1	Tayda Link	
UF4007	Ultra-fast rectifier diode	1	Tayda Link	
1N5817	Schottky diode	1	Tayda Link	
LED	3mm or 5mm	3	Tayda Link	
100uH	100uH 2A Inductor	1	Tayda Link	
2N3904	NPN General Purpose Amplifier	1	Tayda Link	
IRF740	400V 20A N-Channel MOSFET	1	Tayda Link	
NE555	Timer IC	1	Tayda Link	
Socket	8-pin DIP socket	1	Tayda Link	
12AX7	Dual Triode	3	AES Link	
Socket	9-pin Tube Socket	3	AES Link	PPCB Link

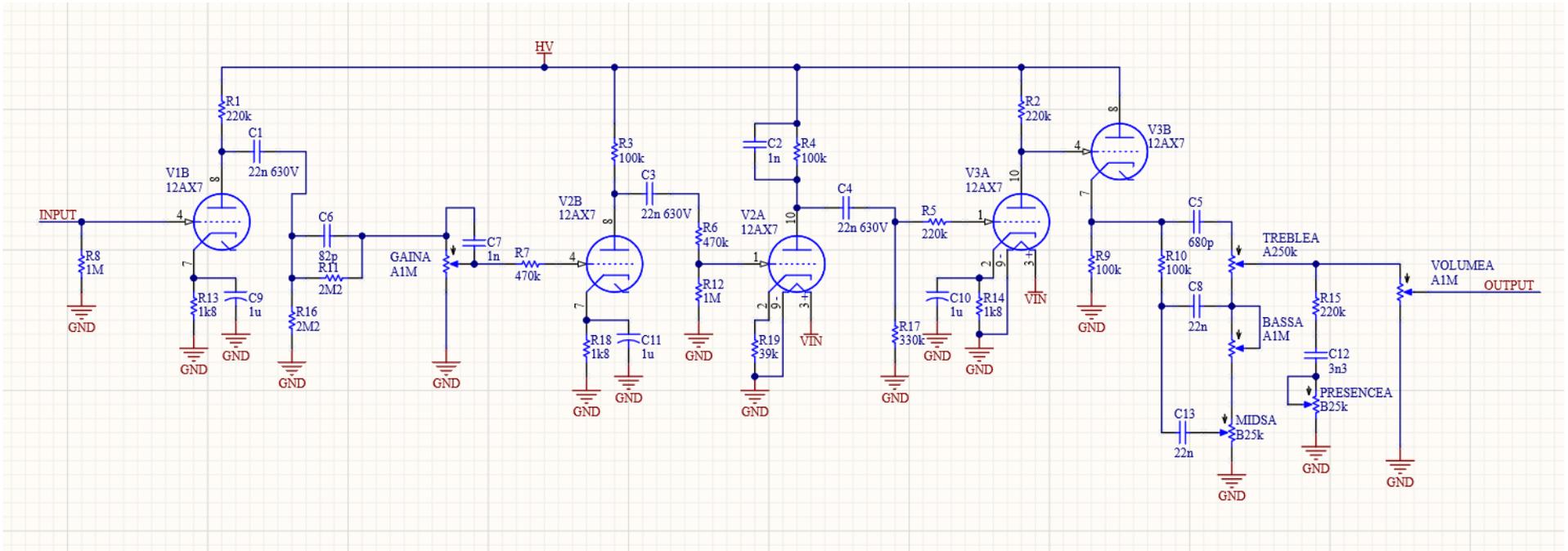
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6-pin Header	Single row straight male header	1	Tayda Link	
2x5 RA Header	Dual row right-angle male header	1	Tayda Link	
3PDT	3PDT footswitch	1	Tayda Link	
1590XX	Aluminum enclosure	1	Tayda Link	
1/4" mono	1/4" mono jack	2	AES Link	
2.1mm	2.1mm DC jack	1	AES Link	

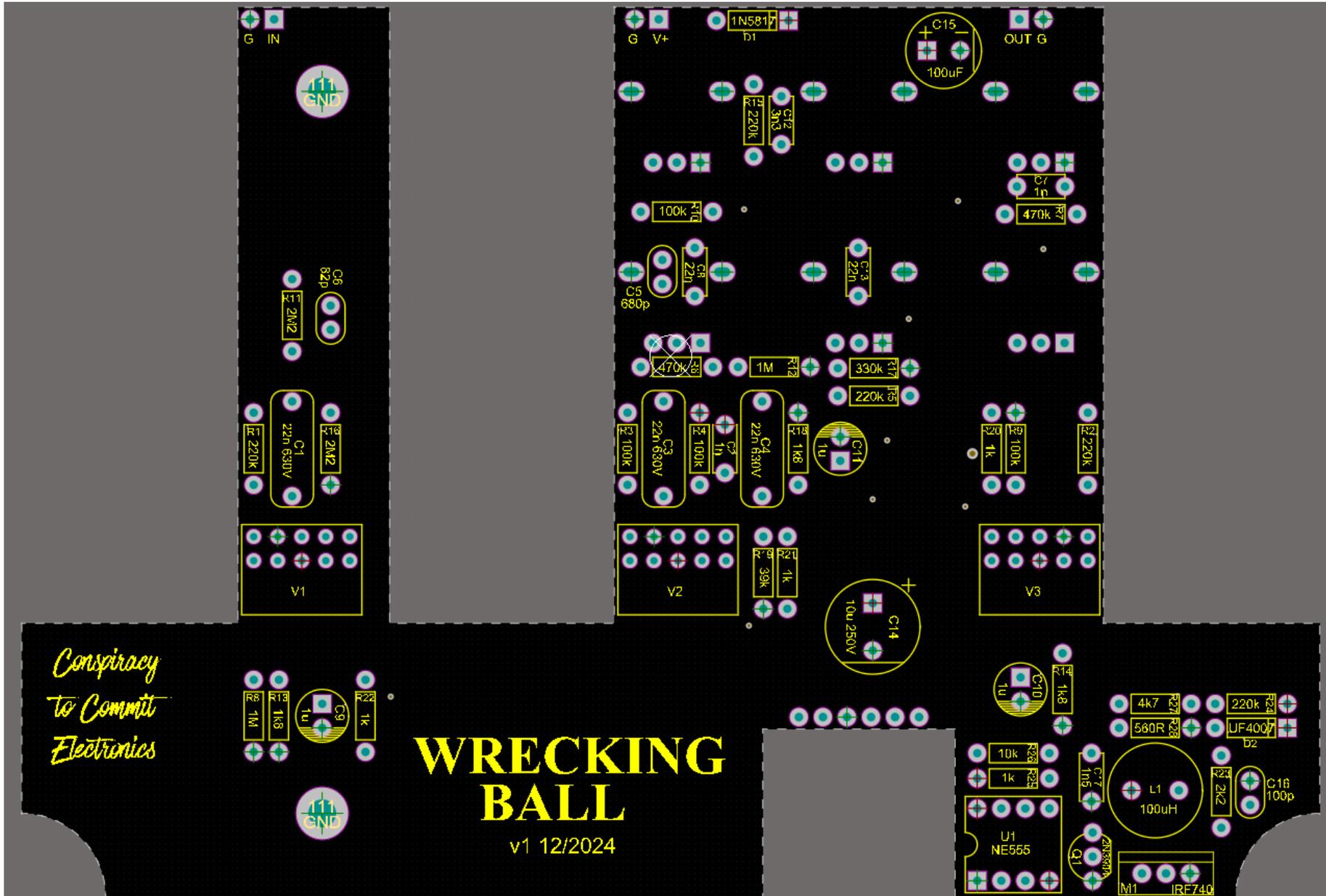
Schematic: Power Supply



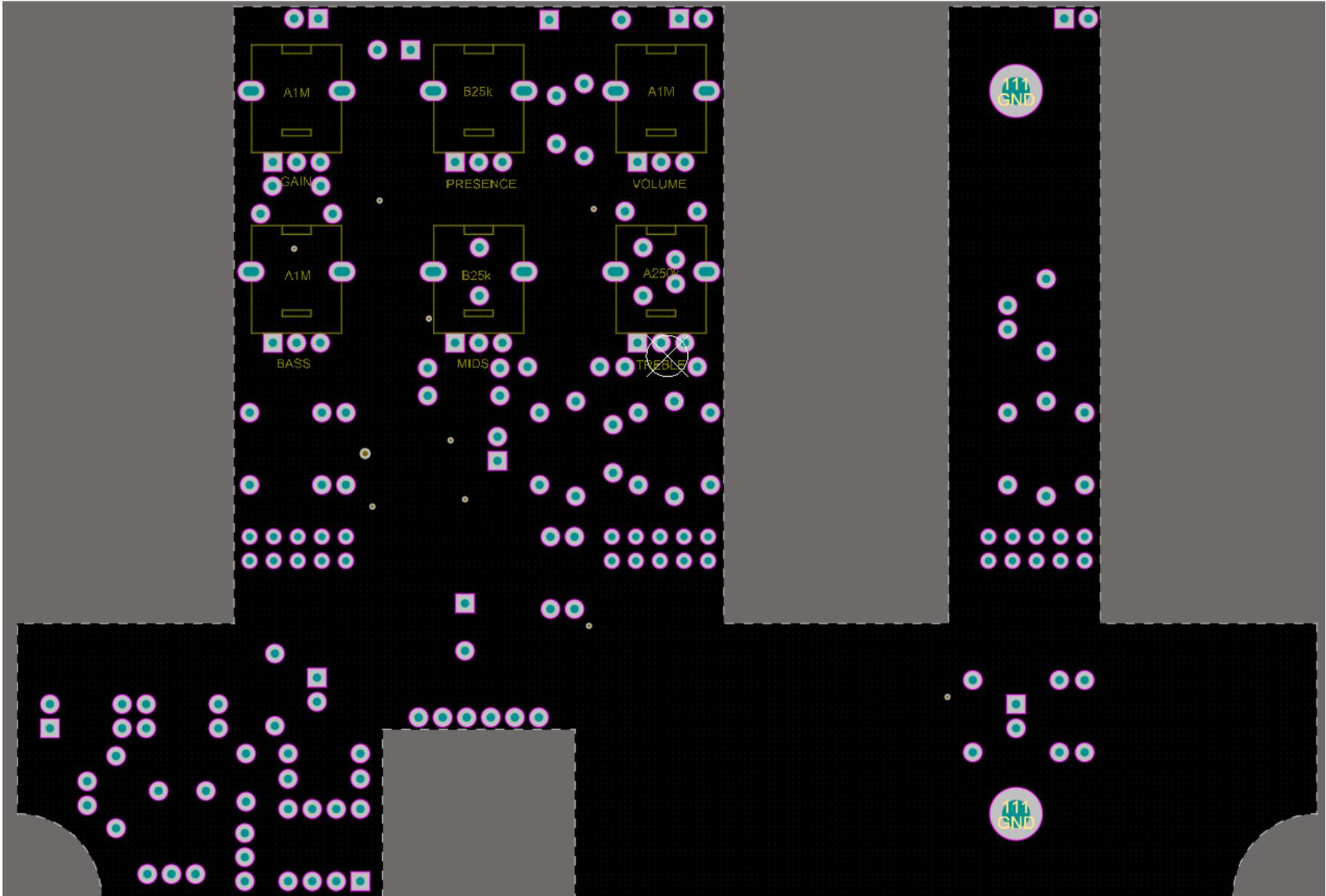
Schematic: Audio



Board Layout - Top



Board Layout – Bottom



Drill Template – 1590XX Print to 100% scale; provided as a reference with no guarantees. The red holes are optional for tube ventilation. Feel free to use as many (or few) of them as you want.

